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**Kawashima**

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(54) **METHOD, APPARATUS, AND RECORDING MEDIUM FOR MODIFYING A VIEW IN CAD**

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(\*) **Notice:** Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

5,699,535 A \* 12/1997 Amro  
5,760,772 A \* 6/1998 Austin  
5,956,032 A \* 9/1999 Argiolas  
6,141,008 A \* 10/2000 Bloomfield  
6,166,736 A \* 12/2000 Hugh

#### FOREIGN PATENT DOCUMENTS

JP	2-77832	3/1990
JP	9-101863	4/1997

\* cited by examiner

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(56) **References Cited**

#### U.S. PATENT DOCUMENTS

5,487,143 A \* 1/1996 Southgate

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(57) **ABSTRACT**

A computer-aided design apparatus improves operability in CAD and includes a view function which automatically enlarges a view frame or automatically modifies the display scale factor if a drawing element that exceeds the view frame is input. The computer-aided design apparatus performs design work by setting a plurality of views of different origins and coordinate systems on a screen.

**11 Claims, 12 Drawing Sheets**

